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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,799	12/27/2001	Shuji Ichikawa	053466-0320	1385

22428 7590 07/03/2003

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 07/03/2003

*f*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/026,799

Applicant(s)

ICHIKAWA, SHUJI

Examiner

Veronica F. Faison

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3 and 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano et al (US Patent 5,702,512).

Yano et al teach oil ink composition comprising titanium dioxide as pigment, resin and organic solvent contains a compound (A) which has at least one amide group or amino group and a compound (B) selected from phosphoric acid and phosphate compound. The oil ink composition may be used in a ballpoint pen (abstract and col. 2 lines 2-6). The reference further discloses that compound (A) may be lauryl polyethylene polyamide and stearyl polyethylene polyamide (weakly cationic component) may be added in the amount of 0.05 to 15 percent by weight (col. 2 lines 20-32), which will have the structure set forth in claim 5. Compound (B) may be selected from compounds such as polyoxyethylene lauryl ether phosphate (phosphate ester) are present in the amount of 0.05 to 15 percent by weight (col. 2 lines 40-50). The titanium dioxide is present in the amount of 1 to 60 percent by weight (col. 2 lines 59-61). The organic solvent may be selected from alcohols, glycol ethers and ketones which may be present in the amount of 5 to 90 percent by weight (col. 2 line 63-col. 3 line 8). A resin component may be present in the ink composition in the amount of 1 to

50 percent by weight (col. 3 lines 9-29). Other components such as nonionic surfactants may be added to the ink composition (col. 3 lines 30-41). See claims 1-8. The composition of Yano et al appears to anticipated the claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

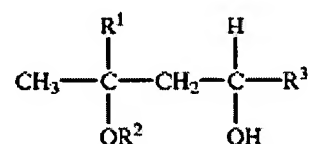
Claims 1- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kito et al (US Patent 5,785,746).

Kito et al teach an shear-thinning water-based ballpoint pen ink composition comprising from 1 to 35 percent by weight of colorant, 2 to 35 percent by weight of water-soluble polar solvent, 1 to 30 percent by weight of a nonionic surfactant active agent and the balance being water and adjusting additives (abstract and col. 3 lines 7-19). The nonionic surfactants listed by the reference include polyoxyethylene fatty acid amides, polyoxyethylene alkyl amine, phosphoric esters which may be a single or mixtures of monoesters, diesters or trimesters (which may have the structures set forth in claim 2), and the reference also states that any of the surface active agents may be used alone or in mixtures of two or more (col. 5 line 21-col. 8 line 16). Kito et al fail to teach the combination of a phosphoric acid ester and a weakly cationic component.

Kito et al fail to specifically exemplify the combination of a phosphoric acid ester and a weakly cationic component as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the combination of a phosphoric acid ester and a weakly cationic component as claimed by applicant as Kito et al also discloses the use of a phosphoric acid ester and a weakly cationic component but shows no example incorporating them together.

Claims 1, 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al (US 2003/0075074).

Ichikawa et al teach an oil-based ink composition for ball-point pen comprising one or more of the following solvents: (I) a solvent having the chemical formula:  $C_nH_{2n+1}OC_3H_6OH$ , (II) a propylene glycol monomethyl ether, and (iii) a solvent having the following chemical formula (2):



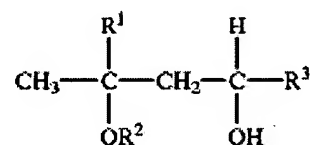
Wherein R1, R2 and R3 each is independently H or CH3. The reference further teaches that a solvent may be added within the range of not adversely affecting the solubility or exertion of the performance of a phosphoric acid ester and an imidazoline-type activator or a polyoxyethylene alkyl amine (page 5 para. 0070-0075 and page 6 para. 0077-0078). The reference further teaches that a resin may be present in the amount of 1 to 30 percent by mass (page 6 para. 0080-0081). Ichikawa et al fail to specifically exemplify the combination of a phosphoric acid ester and a weakly cationic

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component as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the combination of a phosphoric acid ester and a weakly cationic component as claimed by applicant as Ichikawa et al also discloses the use of a phosphoric acid ester and a weakly cationic component but shows no example incorporating them together.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al (US 2003/0075074) as applied to claims 1 and 9-14 above, and further in view of Asami et al.

Ichikawa et al teach an oil-based ink composition for ball-point pen comprising one or more of the following solvents: (I) a solvent having the chemical formula:  $C_nH_{2n+1}OC_3H_6OH$ , (II) a propylene glycol monomethyl ether, and (iii) a solvent having the following chemical formula (2):



Wherein R1, R2 and R3 each is independently H or CH3. The reference further teaches that a solvent may be added within the range of not adversely affecting the solubility or exertion of the performance of a phosphoric acid ester and an imidazoline-type activator or a polyoxyethylene alkyl amine (page 5 para. 0070-0075 and page 6 para. 0077-0078). The reference further teaches that a resin may be present in the amount of 1 to 30 percent by mass (page 6 para. 0080-0081). Ichikawa et al fail to teach the specific components of a ballpoint pen.

Asami et al teach an ink follower composition for ballpoint pens, which follows ink without leaving ink behind on the inner wall of an ink container (abstract and col. 1 lines 40-54). The reference further teaches that the ink that may be used with the follower can be a conventional aqueous or oil-base ink (co. 4 lines 66-67). The ball that may be used in the pen is selected from stainless steel, ceramics and ruby having a diameter of about 0.3 to 1.2 mm. The reference also teaches that the ink tube can be connected to the tip either directly or via a connecting member (col. 7 lines 1-21). Therefore it would have been obvious to one of ordinary in the art to use the ink composition of Ichikawa et al in the ballpoint pen of Asami et al, because Asami et al teach that a conventional oil-base ink may be used.

### ***Conclusion***

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.



Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Veronica F. Paison  
June 30, 2003



Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700